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Objectives: Opioid overdose (OOD) is a serious public health crisis in the US. Naloxone, an opioid antagonist, reverses opioid overdoses. Data on prevalence, demographics, and healthcare utilization of OOD and OOD at-risk individuals remain largely unreported. Naloxone prescriptions for these groups are examined. **Methods:** This retrospective analysis used anonymized Optum health claims data, included over 180 million covered lives from Commercial, Managed Medicare and Medicaid plans. Eligible patients were ≥ 18 years old with medical and pharmacy benefits and minimum 30 days continuous enrollment from January 2016 - December 2019. ICD-10 codes for opioid poisoning were used to identify the OOD population (OODP). The OOD at-risk population (ARP) was classified utilizing one or more CDC risk factor criteria, identified through use of both ICD-10 codes and NDC drug codes. NDC drug codes were used to identify individuals prescribed naloxone in both cohorts. **Results:** Of 7.87 million individuals included, prevalence of OODP declined by 9% from 2016-2019. In the same period, prevalence of ARP declined by 16%. In 2019, the largest group of OODP was aged 30-49 years (35%), male (53%), Caucasian (75%), and Medicaid beneficiaries (60%). In contrast, ARP were mostly aged ≥ 50 years (65%), female (61%), Caucasian (73%), and Medicare beneficiaries (70%). Only 20% of OODP and 5% of ARP received naloxone in 2019. Cost per opioid overdose episode was \$3,200 for individuals on naloxone and \$10,400 for those not. **Conclusions:** This large retrospective analysis suggests that despite CDC guidelines and prevalence of opioid overdose and at-risk patients, naloxone remains under-dispensed, which may result in a high healthcare utilization burden. Preliminary data suggests that previously unrecognized populations appear to be at-risk and require further evaluation. Analysis of healthcare costs associated with at-risk populations and the impact of naloxone administration on disease state management and OOD-associated morbidity and mortality is ongoing.

PMH23 EPIDEMIOLOGY OF ACUTE AGITATION SECONDARY TO SCHIZOPHRENIA AND/OR BIPOLAR DISORDER IN PATIENTS PRESENTING TO EMERGENCY DEPARTMENTS, A SYSTEMATIC LITERATURE REVIEW

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Objectives: To conduct a systematic literature review to characterize the epidemiology of acute agitation episodes secondary to schizophrenia and bipolar disorder in the emergency department (ED) setting. **Methods:** MEDLINE, Embase, and PsychInfo were searched for relevant evidence by two independent analysts against predefined criteria from 01/01/2000 - 09/01/2020. **Results:** Six of 974 references were identified as relevant for inclusion in this analysis. A wide range of acute agitation prevalence rates were reported from 1.9 to 21%. Depending on which of 2 types of prevalence definitions were used; one indication first and acute agitation as a stratification, while the other directly assessed acute agitation events upon ED presentation. Prevalence of 12.2 to 12.1% was reported for acute agitation patients with schizophrenia and/or bipolar disorder presented to the ED while the prevalence of 1.9 to 10% of patients within an ED are observed with acute agitation. None of the identified studies (published 2008 to 2018) discussed the impact of patient demographic and clinical factors on the incidence or prevalence rates of acute agitation in schizophrenia or bipolar disorder. Data sources were uniformly non-commercially available electronic hospital records and methods were both prospective and retrospective observational in nature. **Conclusions:** Acute agitation is a frequent (but often unaddressed) symptom reported by patients with schizophrenia and bipolar disorder ranging from uneasiness to aggression and violence. Two, large, national US surveys reported that patients presenting with agitation and mental health complaints are common in the ED, with schizophrenia accounting for 387,000 visits per year, and bipolar disorder accounting for 236,000 visits per year. Acute agitation epidemiology evidence in schizophrenia and/or bipolar disorder in emergency care represents a clear evidence gap with variations in patient cohort definitions limiting cross-study comparisons. Further research on this topic is warranted.

PMH24 DEMOGRAPHIC AND CLINICAL FACTORS ASSOCIATED WITH POST TRAUMATIC STRESS DISORDER (PTSD) DURING THE COVID-19 PANDEMIC

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Objectives: Post-traumatic stress disorder (PTSD) is a mental health condition initiated by psychological trauma. The novel coronavirus disease (COVID-19) pandemic has been a source of great fear and stress. Few studies have reported on psychiatric disorders among patients with COVID-19. The goal of this study was to identify demographic and clinical factors associated with PTSD among patients with confirmed COVID-19. **Methods:** This retrospective observational study utilized the IBM® Explorys® electronic health record database. Participants included patients with a first COVID-19 diagnosis between December 1, 2019 and

July 31, 2020. The outcome of interest was a diagnosis for PTSD after COVID-19 infection. COVID-19 diagnoses were determined via the Standard Systematized Nomenclature of Medicine-Clinical Terms (SNOMED-CT) codes or positive test results; PTSD diagnoses were identified by SNOMED-CT codes. Factors examined included age, sex, race and ethnicity, Deyo-Charlson Comorbidity Index (CCI), mental health history, COVID-19 severity (e.g. intensive care unit (ICU) admission), and lifestyle. Logistic regression models were employed to investigate the strength of the association (odds ratio (OR) and 95% confidence intervals (CI)) between each factor and PTSD. Factors with a p-value < 0.20 were selected for a subsequent multivariable model. **Results:** Of 89,457 (mean age 47 years; 57% female) patients with a COVID-19 diagnosis, 373 developed PTSD. Age, female, race and ethnicity, CCI, mental health history, COVID-19 severity, smoking status and obesity were significantly associated with PTSD. Age (OR=0.98 [95% CI 0.97-0.99]), mental health history (4.39 [3.05-6.18]), COVID-19 severity (hospitalization (2.50 [1.81-3.42]); ICU admission (8.22 [5.33-12.32])), smoking status (1.39 [1.05-1.82]), and obesity (1.84 [1.43-2.38]) were independently associated with PTSD in a multivariable model. **Conclusions:** This study identified a wide variety of factors associated with PTSD after COVID-19 infection. These findings can guide healthcare professionals to develop programs targeted at COVID-19 patients at risk for PTSD.

PMH26 EARLY IMPACT OF COVID-19 PANDEMIC ON ANTIPSYCHOTIC MEDICATION USE AMONG PATIENTS WITH SCHIZOPHRENIA

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Background: Outpatient care utilization decreased dramatically following the COVID-19 pandemic but less is known about changes in medication use. **Objectives:** To estimate changes in antipsychotic medication use, overall and by policies restricting LAI administration by pharmacists, in the first four months of the pandemic. **Methods:** A cross-sectional study of claims, from Decision Resources Group, was conducted among 578,011 schizophrenia patients. Percent change in medication use from 17 weeks prior to (pre-pandemic) and following (pandemic) 3/2/2020 were calculated. Antipsychotic use was categorized by administration route, channel, amount, and by state regulations authorizing pharmacist LAI administration: "authorized", authorized with collaborative practice agreement ("CPA"), and not authorized ("restricted"). Comparisons were made among Medicaid, Medicare, and commercially-insured populations. **Results:** Among the Medicaid, Medicare, and commercially-insured populations, days' supply for oral antipsychotics increased by 1.4%, 1.8%, and 4.3%. Retail-dispensed oral antipsychotics increased 0.9% among commercially-insured and decreased 1.4% and 2.3% for Medicaid and Medicare, while mail order prescriptions increased by 16.7% (commercial), 29.6% (Medicaid), and 32.5% (Medicare). In contrast, LAI claims decreased by 1.5%, 2.5%, and 4.8%. Approximately 60% of all LAIs were dispensed in authorized states, compared to 25% in CPA and 15% in restricted states. LAI prescriptions decreased by 1.2%, 3.3% and 7.3%, respectively. Commercially-insured individuals filled 4.1% more LAI claims in authorized states but 8.3% and 12.8% fewer claims in CPA and restricted states. Medicaid patients filled 1.8% fewer LAI prescriptions in authorized and CPA states and 5.8% fewer in restricted states, while Medicare patients filled 4.4%, 5.7%, and 5.7% fewer LAIs. **Conclusions:** In the early months of the COVID-19 pandemic, oral antipsychotic use increased due to a transition to mail order, and LAI use decreased. Medicaid and Medicare patients had greater reductions in LAI use than commercial patients. State policies restricting pharmacist administration of LAIs affected utilization across all insurance groups.

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PMH27 IMPACT OF STATE LAWS RESTRICTING OPIOID PRESCRIPTIONS FOR ACUTE PAIN ON OPIOID-RELATED OVERDOSE DEATHS ASSESSED VIA INTERRUPTED TIME SERIES ANALYSES

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Objectives: Many states have implemented limitations on opioid prescriptions for patients with acute pain. Few studies have investigated relationships between prescribing restrictions and clinical outcomes. We assessed effects of acute pain prescribing restriction laws on trends in opioid-related overdose deaths among states that implemented these policies. **Methods:** We evaluated the effects of state laws on three outcomes: all-opioid, prescription opioid, and heroin-related overdose deaths. We ascertained overdose death counts using corresponding ICD-10 codes from the Centers for Disease Control and Prevention's Wide-ranging Online Data for